

AMENDMENTS TO THE CLAIMS

(IN FORMAT COMPLIANT WITH THE REVISED 37 CFR 1.121)

Please cancel claim 5 without prejudice.

1. (CURRENTLY AMENDED) An apparatus comprising:

a first circuit configured to calculate and present write an output signal having a first resolution and a plurality of output input pixels to a memory in response to (i) an input signal having a second resolution and a plurality of output input pixels ~~read from said memory~~ and (ii) one or more control signals, wherein said input signal is received a scan line at a time; and

10 a second circuit configured to generate said control signals in response to (i) a previous calculation by said first circuit and (ii) one or more input parameters, wherein said first circuit is configured to scale and filter said input signal to allow one or more of said input pixels to contribute to the creation of one or more of said output pixels, wherein said apparatus comprises a portion of a block move engine (BME).

2. (ORIGINAL) The apparatus according to claim 1, wherein said input signal comprises a 3-component video signal.

3. (ORIGINAL) The apparatus according to claim 1, wherein said input signal comprises a 3-component video signal with a separate alpha component.

4. (ORIGINAL) The apparatus according to claim 1, wherein said first circuit independently calculates a horizontal component and a vertical component of said output signal.

5. (CANCELED)

6. (ORIGINAL) The apparatus according to claim 1, wherein said apparatus is configured to operate on one or more blocks of data.

7. (ORIGINAL) The apparatus according to claim 6, wherein said apparatus is configured to read a block of data a scan line at a time.

8. (PREVIOUSLY PRESENTED) The apparatus according to claim 7, wherein said apparatus is configured to (i) process said scan line, (ii) write said scan line back to said memory and (iii) process a next scan line.

9. (ORIGINAL) The apparatus according to claim 1, wherein said apparatus is configured to filter data providing improved appearance of scaled images.

10. (PREVIOUSLY PRESENTED) The apparatus according to claim 1, wherein said apparatus is configured to allow two or more of said input pixels to contribute to the creation of one or more of said output pixels.

11. (ORIGINAL) The apparatus according to claim 1, wherein said apparatus is configured to scale alpha data associated with an image.

12. (CURRENTLY AMENDED) An apparatus comprising:  
means for calculating an output signal having a first resolution and a plurality of output pixels ~~to write to a memory~~ in response to (i) an input signal having a second resolution and a plurality of input pixels ~~read from said memory~~ and (ii) one or more control signals, wherein said input signal is received a scan line at a time;

means for generating said control signals in response to (i) a previous calculation by said means for calculating and (ii) one or more input parameters; and

means for scaling and filtering said input signal to allow one or more of said input pixels to contribute to the creation of one or more of said output pixels, wherein said apparatus comprises a portion of a block move engine (BME).

13. (CURRENTLY AMENDED) A method for scaling and filtering of video, comprising the steps of:

(A) calculating an output signal having a first resolution and a plurality of output pixels in response to (i) an input signal having a second resolution and a plurality of input pixels and (ii) one or more control signals, wherein said input signal is received a scan line at a time;

(B) generating said control signals in response to (i) a previous calculation by step (A) and (ii) one or more input parameters; and

(C) scaling and filtering said input signal to allow one or more of said input pixels to contribute to the creation of one or more of said output pixels, wherein the method is implemented in a block move engine (BME).

14. (PREVIOUSLY PRESENTED) The method according to claim 13, wherein said input signal comprises a 3-component video signal.

15. (PREVIOUSLY PRESENTED) The method according to claim 13, wherein said input signal comprises a 3-component video signal with a separate alpha component.

16. (PREVIOUSLY PRESENTED) The method according to claim 13, wherein step (A) further comprises:

independently calculating a horizontal component and a vertical component of said output signal.

17. (PREVIOUSLY PRESENTED) The method according to claim 13, further comprising the step of:

operating on one or more blocks of data.

18. (PREVIOUSLY PRESENTED) The method according to claim 17, further comprising the step of:

reading a block of data a scan line at a time.

19. (PREVIOUSLY PRESENTED) The method according to claim 18, further comprising the step of:

(i) processing said scan line, (ii) writing said scan line back to a memory and (iii) processing a next scan line.

20. (PREVIOUSLY PRESENTED) The method according to claim 13, further comprising the step of:

filtering to data provide improved appearance of scaled images.

21. (PREVIOUSLY PRESENTED) The method according to claim 13, further comprising the step of:

allowing one or more input pixels to contribute to the creation of two or more output pixels.

22. (PREVIOUSLY PRESENTED) The apparatus according to claim 1, further comprising:

a microprocessor coupled to said second circuit through a bus.